

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

CT IPS AM Mch P

PCT

To:

see form PCT/ISA/220

rec. APR 11 2005

IP 01.10.05  
time limit

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference

see form PCT/ISA/220 2004 P 08 304 WO

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.  
PCT/EP2004/053021

International filing date (day/month/year)  
19.11.2004

Priority date (day/month/year)  
01.12.2003

International Patent Classification (IPC) or both national classification and IPC  
H04M11/06, H04Q11/00

Applicant

SIEMENS AKTIENGESELLSCHAFT

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office  
D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
Fax: +49 89 2399 - 4465

Authorized Officer

Telephone No. +49 89 2399-



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2004/053021

---

**Box No. I Basis of the opinion**

---

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2004/053021

---

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
Industrial applicability; citations and explanations supporting such statement**

---

**1. Statement**

Novelty (N)	Yes: Claims	5,10-12,19,24,25,29-32,36-39,42-45,48,49,52-65
	No: Claims	1-4,6-9,13-18,20-23,26-28,33-35,40,41,46,47,50,51
Inventive step (IS)	Yes: Claims	
	No: Claims	1-65
Industrial applicability (IA)	Yes: Claims	1-65
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

1. Reference is made to the following document:

D1: US 2003/037095 A1 (SHARMA VISWA) 20 February 2003 (2003-02-20)

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. Document D1 discloses (the references in parentheses applying to this document): a method for managing a network providing data services to a subscriber (see page 1, paragraph 4), wherein the network comprises an Optical Line Terminal, OLT, and an Optical Network Unit, ONU, connected to the OLT via a passive optical network (see page 3, paragraphs 49 and 50 and Figure 1, in particular the DC-AGSEP and RT-AGSEP), wherein the ONU is connected to the subscriber through an xDSL connection (see page 3, paragraph 51 and Figure 1), the method comprising: providing a plurality of manager entities for managing the ONU (see page 4, paragraph 4 and Figure 3), wherein the plurality of manager entities further comprise Asymmetric Digital Subscriber Line, ADSL, entities for managing an ADSL connection between the ONU and the subscriber (see Figure 3), and VDSL entities for managing a VDSL connection between the ONU and the subscriber (see Figure 3); managing the network through one or more of the plurality of manager entities (see page 4, paragraph 58); and communicating data and network management information between the OLT and the ONU in response to the manager entities (see page 4, paragraphs 59 and 60).
3. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 46 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parentheses applying to this document): a communications network for providing communications services to a plurality of subscribers through a plurality of xDSL lines (see page 2, paragraphs 24 and 25); a passive optical communications path disposed between the first optical terminal unit and the second optical terminal unit for carrying information therebetween (see page 3,

paragraph 48 and Figure 1); wherein the first optical terminal unit operates as a network manager for managing the second optical terminal units and the xDSL lines using a plurality of managed entities (see page 3, paragraphs 49-51).

4. Dependent claims 2-22, 24, 25, 28-32, 34-39, 42-45, 47-51, 54-60, 62-65 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), see documents cited in the International Search report and the corresponding passages cited.
5. Since the subject-matter of each of independent claims 23, 26, 33, 40, 41, 46, 52, 53 and 61 corresponds to the subject matter of at least one of claims 1, 27, the same reasoning as given for claims 1, 27 will apply mutatis mutandis. Therefore claims 23, 26, 33, 40, 41 and 46 also do not meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT). Although independent claims 52, 53 and 61 refer to novel features (memory for storing data and an article of manufacture comprising a computer program) these are per se considered well known features in the field of telecommunications and are thus considered as not involving an inventive step (Article 33(3) PCT).

Further Remarks

6. The application does not meet the requirements of Article 6 PCT, because claim 1 is not clear.
  - 6.1 Although apparatus claims 27, 33, 40, 41, 46, 52, 53 and 61 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT. The same objection is also raised against the plurality of independent method claims 1, 23 and 26.
  - 6.2 Claims 1, 23 and 26, 40 do not meet the requirements of Article 6 PCT in that the matter

for which protection is sought is not clearly defined. The contradictory functional statement "...managed entities for managing..." does not enable the skilled person to unambiguously determine which are the technical features involved, ie. determine which entities are being managed and by which manager.

7. If, despite the objections expressed above, the applicant still considers some particular matter as meeting the requirements of Article 33(2) to (4) PCT, then an independent claim including such matter should be filed, indicating what is considered to be the inventive contribution to the state of the art.
8. If any amended independent claims are filed, the opening part of the description including the summary of the invention should be brought into agreement with the wording thereof (Rule 5.1 (iii) PCT).

In order to meet the requirements of Rule 5.1 (a), (ii) PCT, the relevant prior art, i.e. the documents listed above, should be acknowledged by reference and briefly discussed in the introductory part of the description.

9. The independent claims should be drafted in the proper two-part "characterised" form recommended by Rule 6.3(b), (l), (u) PCT, having a preamble that correctly reflects the nearest prior art, presumably that represented by the above noted D1.

All the claims should include reference signs in parentheses where features shown in the drawings are referred to (Rule 6.2(b) PCT).

10. The attention of the applicant is finally drawn to the fact that the application may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed, Article 34(2)(b) PCT. Amendments should be filed by way of replacement pages in the manner stipulated by Rule 66.8(a) PCT. In particular, fair copies of the amendments should be filed in triplicate. Moreover, the applicant's attention is drawn to the fact that, as a consequence of Rule 66.8(a) PCT the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these may be.

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2004/053021